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Combat Vehicle Conference

Col Thomas M. Lytle
Program Manager
Light Armored Vehicles

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Purpose

- Provide overview of LAV Program Objective Memorandum (POM) FY04 initiatives
  - LAV SLEP Status
  - LAV-Anti-Armor System
  - LAV-EFSS (Expeditionary Fire Support System)
  - LAV-C2 Upgrade
- The Future of LAV

Mission of the LAR Battalion

- To conduct reconnaissance, security, limited offensive and defensive operations, and other operations as directed by the Division or Supported Commander
- In support of the Ground Combat Element (GCE) warfighting plans:
  - Conduct reconnaissance for the GCE or Marine Air to Ground Task Force (MAGTF) Commander in the close and deep battle space
  - Conduct Security operations to protect the GCE or MAGTF
  - Shape the Battlefield as a Maneuver Enabler
  - Exploit opportunities with long range firepower and mobility

Program Objective Memorandum (POM) FY04

- POM04 initiatives are designed to ensure that the LAV Family of Vehicles remains a viable, lethal, and cost efficient weapon system while the Marine Corps develops and fields a replacement system

LAV SLEP Overview

- LAV SLEP objectives designed to extend service life to 2015
- #1 USMC Modernization Program
  - Improved reliability
  - Reduce Total Ownership Cost
  - Improved survivability
- SLEP Developmental and Operational Testing complete
- Milestone III decision for SLEP kit production: 9 Apr 02
- IOC Basic SLEP: 4QFY03
- FOC Basic SLEP: 3QFY05

Improved Thermal Sight System (ITSS)

- Award was made to DRS Systems, Parsippany, NY on 12 Dec 01
- Raytheon Company protested the award to the General Accounting Office (GAO)
- After a review of the procurement in light of the protest, the Government has decided that a further evaluation of the proposal is warranted
- The Stop Work Order on DRS' award will remain in place pending the outcome of this evaluation
- Projected program delay: June 2002
- Scheduled ITSS IOC: 3QFY06

LAV Advanced Anti-Tank System (LAV-AAS)

- LAV-AT deficiencies
  - Excessive firing cycle that leaves crew vulnerable for up to two minutes while firing
  - Excessive corrosion due to design imperfections
  - Decreasing readiness rates due to corrosion and inadequate supply support
  - Increasing maintenance costs
  - Low confidence rate for LAV-AT among MEU and LAR Bn Cdrs
- Ranked #8 (essential) by the Ground Combat Board for POM 04

LAV-AAS
Acquisition Strategy

- Strategy: Replace Emerson 901 turret with a common missile platform that will fire TOW, Javelin, and Hellfire missiles with P3I capability to fire future anti-armor missiles
- ATD development work by AMRDEC:
  - Demonstrated fire-on-the-move capability with Javelin
  - Hellfire has been fired on common missile platform
    - Oct 01: Successful demonstration of a Hellfire fire-on-the-move from Helo UAV platform
- Compete AMRDEC work for production

LAV-AAS Acquisition Strategy

- FY02: Milestone A
- FY04: Milestone B
- FY06: Milestone C
- FY08: IOC
- FY09: FOC

Expeditionary Fire Support System (EFSS)

- EFSS will provide all weather, ground-based, close supporting, accurate, immediately responsive, and lethal fires in support of the MAGTF. EFSS will penetrate deep with maneuver units, will be transportable by surface or air, and will provide lethal close fires required in built-up littoral areas.
  - 3 parts: Artillery Regmt, Infantry Regmt, and LAR Bn
- LAV EFSS will address deficiencies of the LAV-M ORD
- Ranked #6 (essential) by the Ground Combat Board for POM 04

LAV EFSS Acquisition Strategy

- Strategy: Leverage PM BCT mortar work pending USMC AOA and cost/benefit analysis
- FY02: Milestone A
- FY04: Milestone B
- FY06: Milestone C
- FY07: IOC
- FY08: FOC

LAV Command & Control (LAV-C2)

- Installation of Universal Communications Interface Module (UCIM)
  - UCIM provides:
    - Hardware and software backbone which allow integration of legacy and future JTRS designs
    - Provides a common functional core that is applicable across a variety of command & control platforms
    - Full spectrum management (SATCOM, UHF, VHF, HF)
    - Allows for the shedding of legacy hardware configurations as technology enhancements are refined
- SATCOM on-the-move

LAV Command & Control (LAV-C2)

- Development:
  - Installation of UCIM ensures LAV-C2 is part of the common USMC C4I platforms which will share the architecture of the future Joint Tactical Radio System (JTRS)
  - Capabilities common to 3 existing USMC platforms (UOC, UH-1 and LAV) providing a total tactical situational picture
- Ranked critical by the Ground Combat Board for POM 04

LAV-C2 Acquisition Strategy

- Compete NRL Drawings for Production/Integration
- Ongoing: Milestone A
- FY04: Milestone B
- FY06: Milestone C
- FY07: IOC
- FY08: FOC

LAV RAM Program

- Maintain a nominal, continuous level of funding to support initiatives addressing O&S cost drivers, maintenance manpower burdens, fleet readiness detractors, and performance shortcomings.
- Implement via:
  - IROAN program
  - Field modifications
  - Modernization Through Spares

LAV RAM Program

- Initiatives under way (not inclusive):
  - Replacement tire
  - Fuel injector/dash speed
  - Espar personnel heater
  - Halon replacement
- Initiatives under study (not inclusive):
  - Imbedded diagnostics
  - Integrated logistics management/autonomic logistics
  - Corrosion prevention
  - Power generation & storage
  - Diesel engine cold start

The Future of LAV?

- Current LAV SLEP objectives designed to extend service life to 2015
- "Fielding of the MEFFV will occur in 2024." Joint Requirements Board, Joint Requirements Panel
  - MEFFV, replacement to LAV:
    - IOC: 2018
    - FOC: 2024
- SLEP II??
- RAM/Rebuild??

LAV SLEP II/RAM Rebuild

- Potential content:
  - Drivetrain upgrade
  - Lethality upgrade
  - Significantly improved fuel efficiency
  - Lightweight protective systems against threat projectiles
  - Lightweight, robust suspension components


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